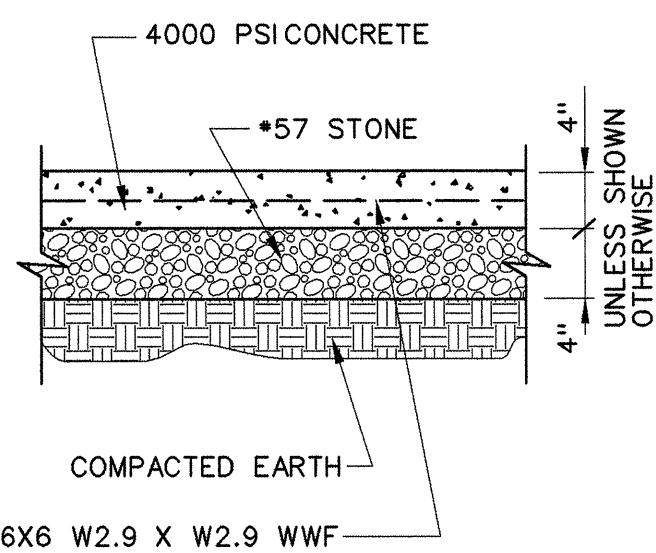


NOTES

- HANDRAILS ALONG RAMPS SHALL EXTEND HORIZONTAL ONE (1) FOOT BEYOND BEGINNING AND END OF RAMP.
- ALL HANDRAILS SHALL BE 1 1/2" OD SS, AND 3'-0" ABOVE WALK, RAMP, AND/OR STEP NOISING.

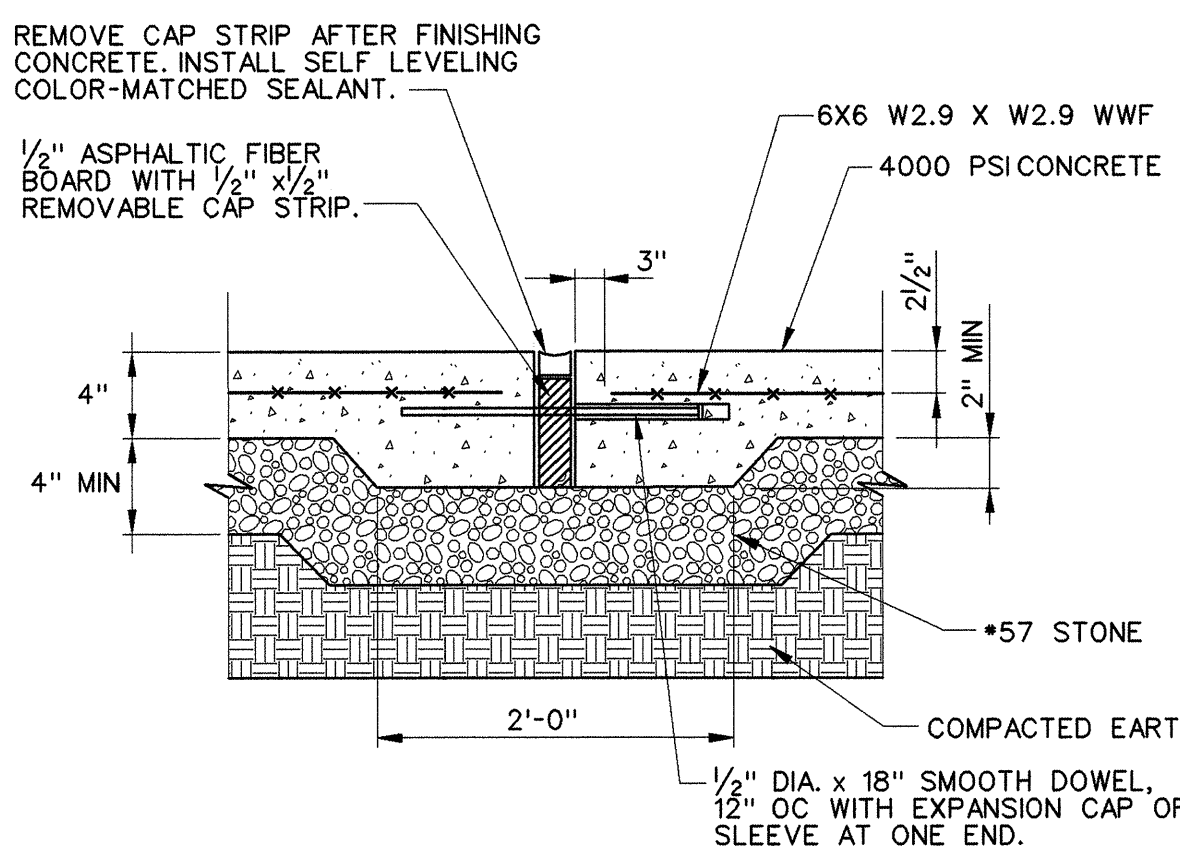


NOTES:

- FINISH SURFACE AS SHOWN ON PLANS AND SPECIFICATIONS.
- ALL EDGES SHALL BE 1/4" R TOOLED.
- INSTALL 1/2" EXPANSION JOINTS AT LOCATIONS SHOWN ON PLANS AND SPECIFICATIONS
- INSTALL 3/4" TOOLED CONTROL JOINTS AT LOCATIONS SHOWN ON PLANS AND SPECIFICATIONS. CONTROL JOINTS SHALL BE A MINIMUM OF 1" DEEP.

TYPICAL SECTION FOR CONCRETE WALKS AND PADS

C1.49.02, C1.49.03 NTS

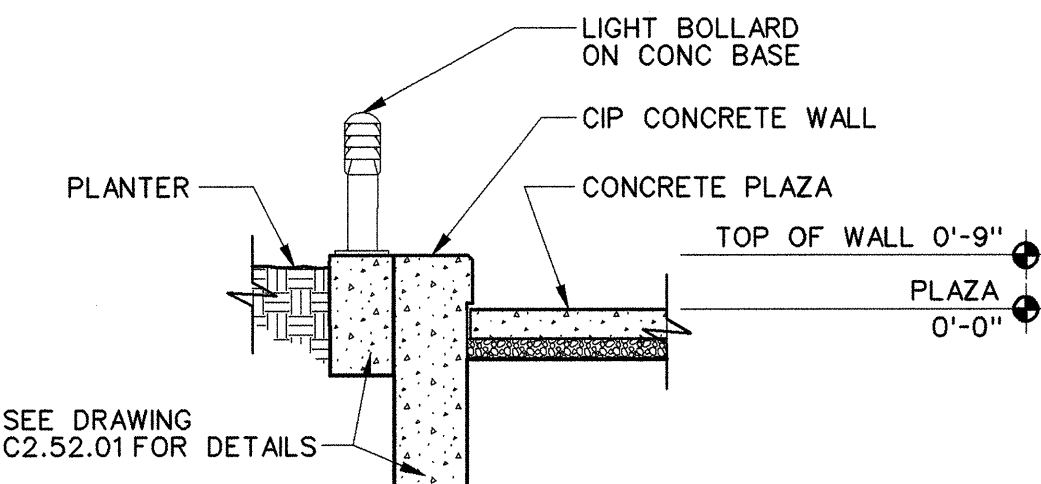


NOTE:

- EXPANSION JOINT TYPICAL FOR ALL CONCRETE WALKS, DRIVES, AND PADS.

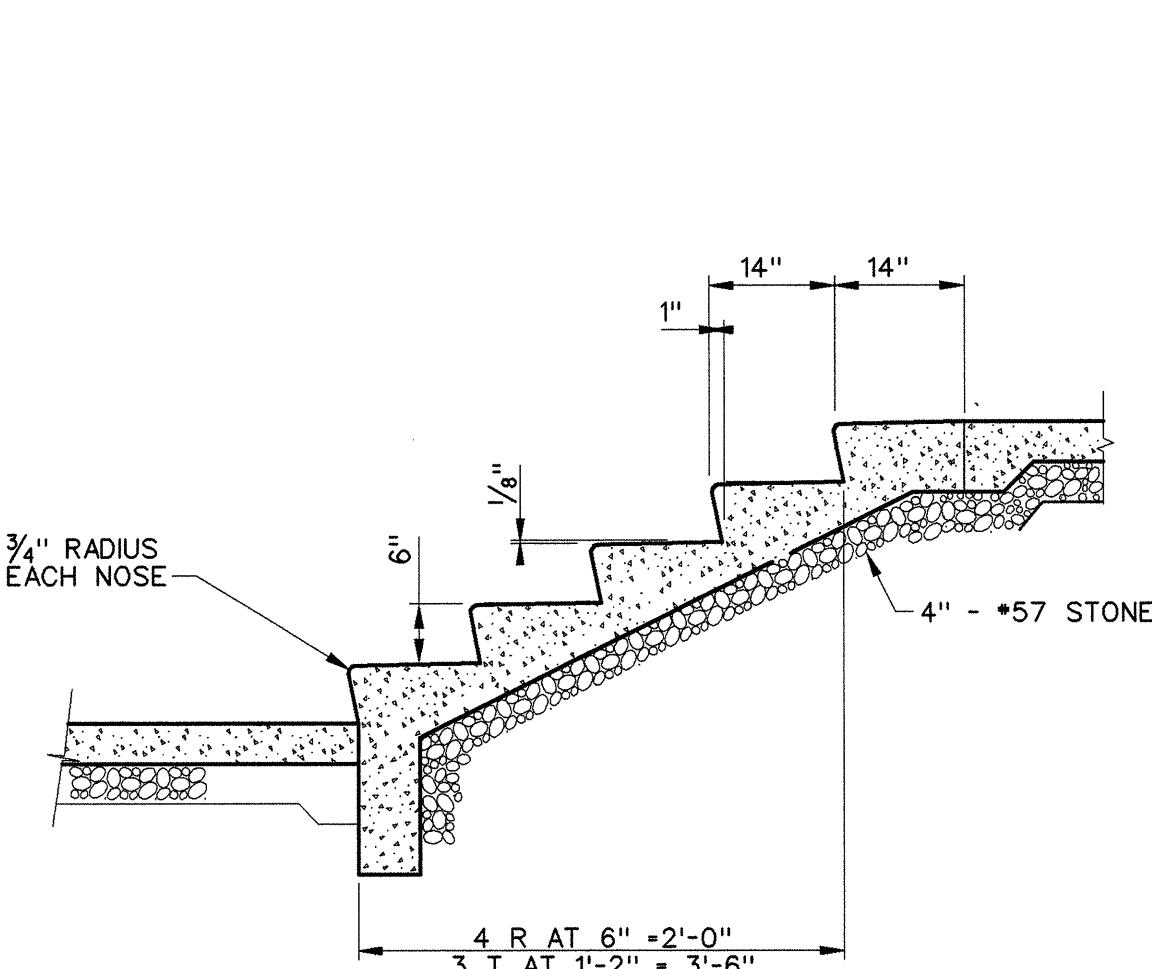
EXPANSION JOINT SECTION

C1.49.02, C1.49.03 NTS



C1.49.02, C1.49.03 NTS

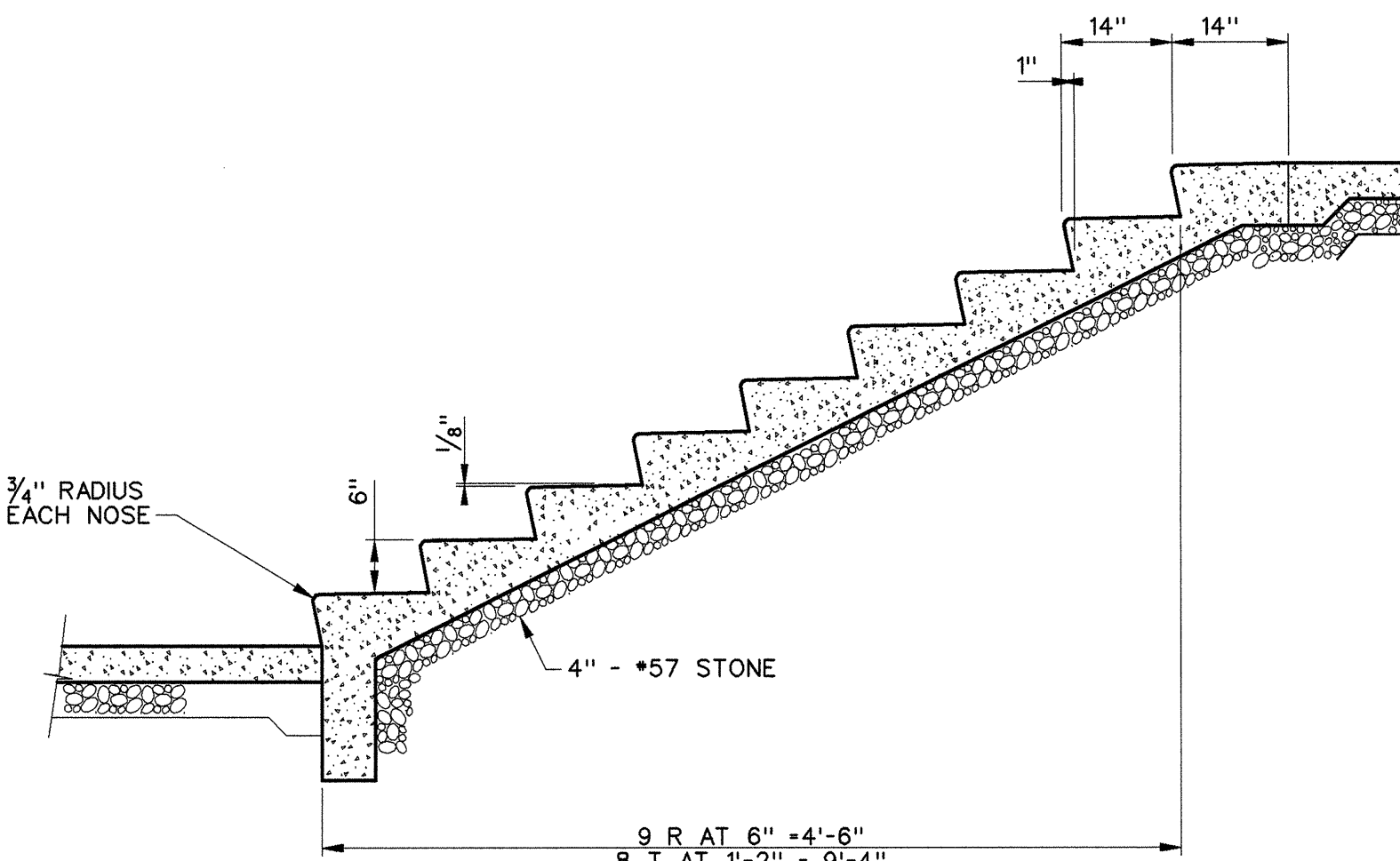
LOW PLANTER WALL SECTION



STAIR SECTION

D STAIR SECTION

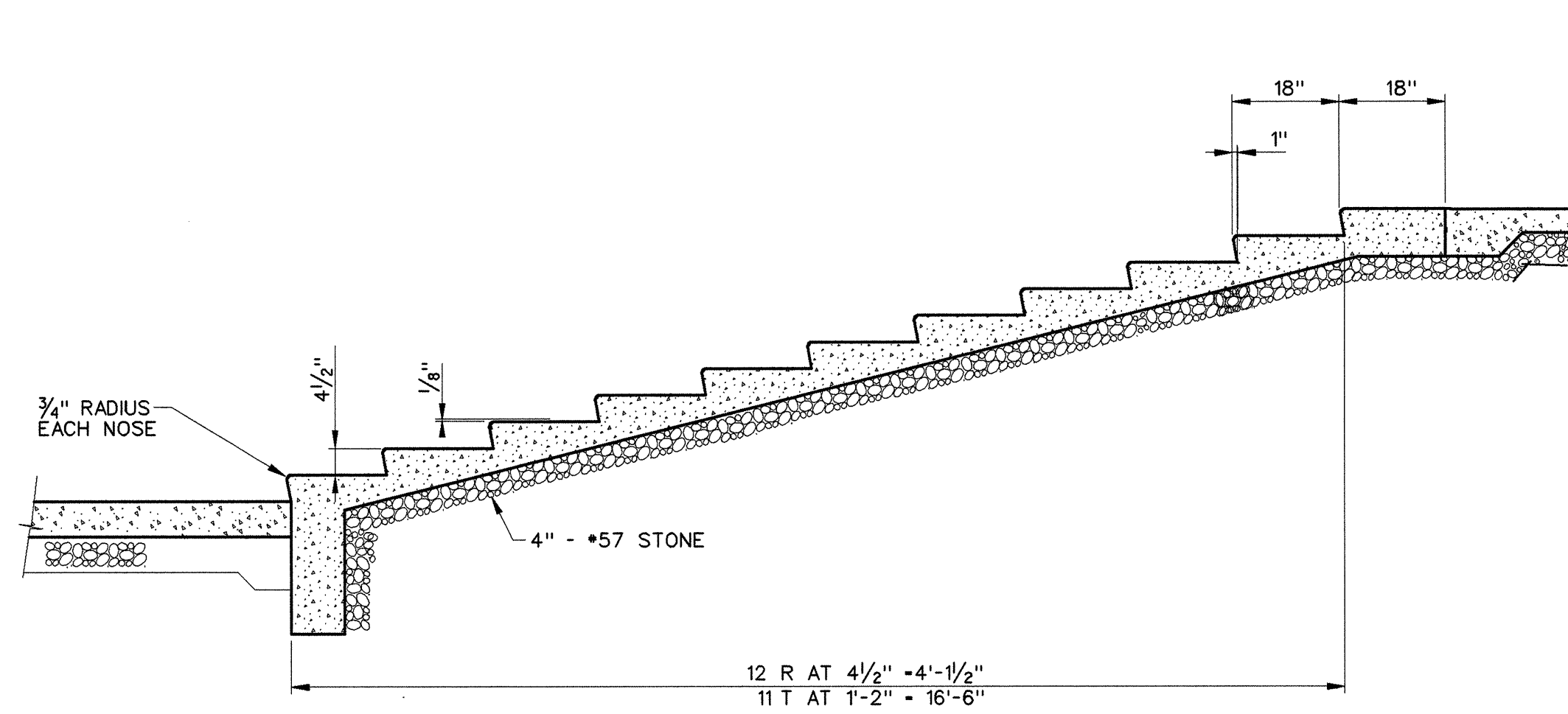
C1.49.03 NTS



STAIR SECTION

E STAIR SECTION

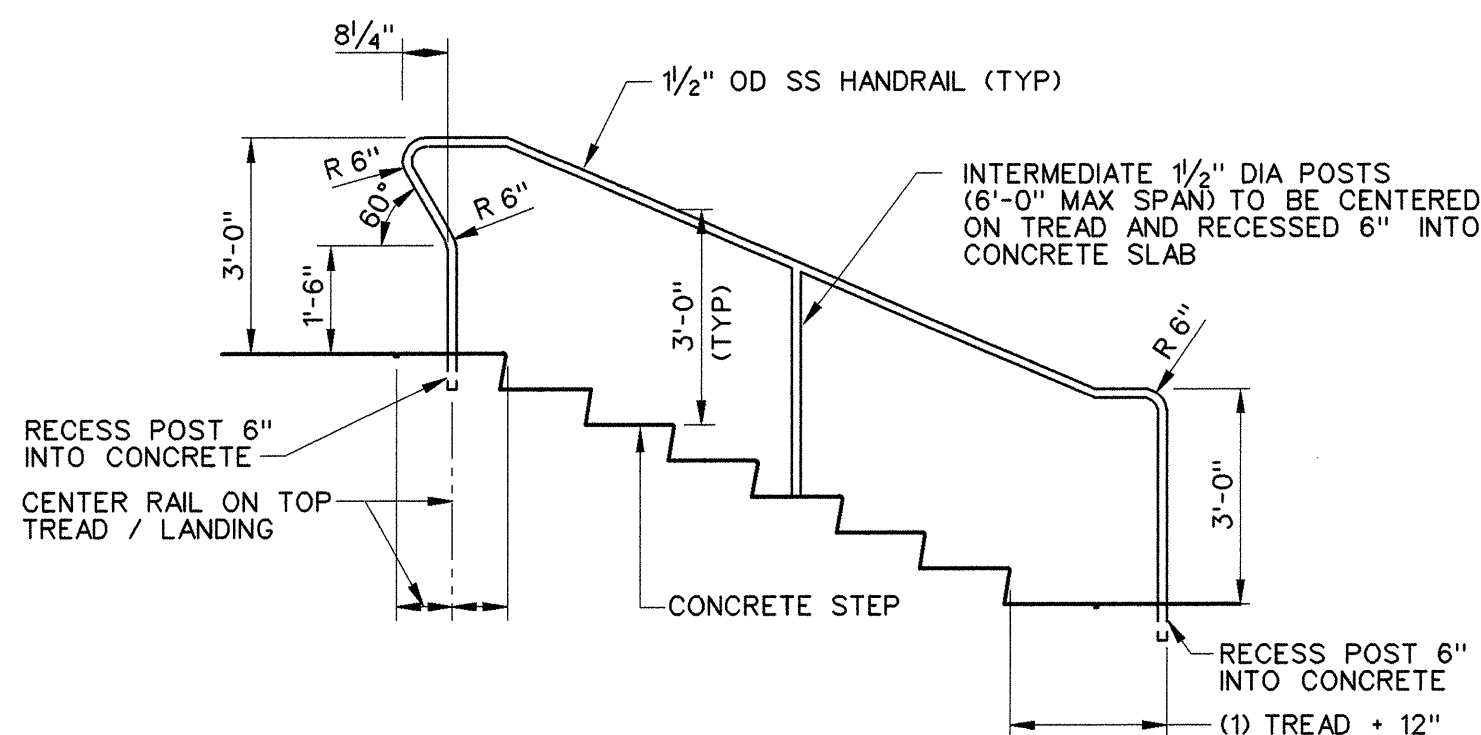
C1.49.03 NTS



STAIR SECTION

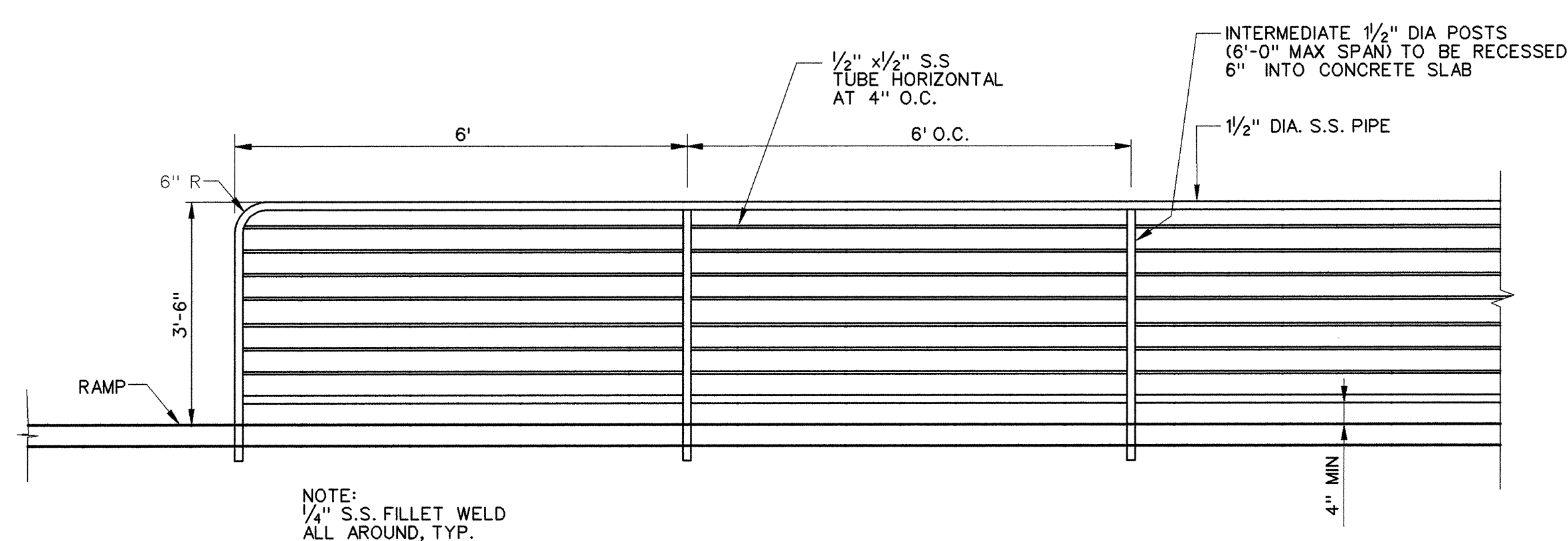
F STAIR SECTION

C1.49.03 NTS



1 TYPICAL HANDRAIL DETAIL

C1.49.02, C1.49.03 NTS



2 GUARD RAIL

C1.49.03 NTS

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NUMBER OF SECTION OR DETAIL

DRAWING ON WHICH SECTION OR DETAIL IS SHOWN OR TAKEN

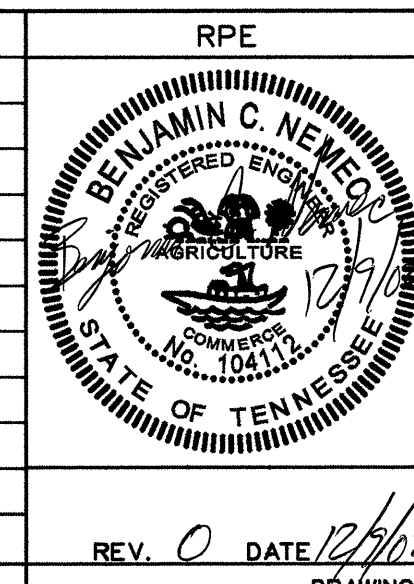
SECTION AND DETAIL KEY

THIS DOCUMENT CONTROLLED BY

CHANGE CONTROL SYSTEM

ENGINEERING PROCEDURE

REV	DATE	DESCRIPTION	DSN	CHK	DEPT	DATE	PE	DATE	DATE	REQ	DATE	UTB	DATE	RPE	RPE NO	DATE	ST	CV	EC	EE	EM	IE	M	PD	SE	AR	SQUAD CHECK	DATE	UTB	DATE	UTB
0		CERTIFIED FOR CONSTRUCTION - 12/9/2002	BCN	JHB																											
1	12/05/02	REVISED TO ADD GUARD RAIL	BCN	JHB																											



DSGN	B. NEMEC	12/09/02
DRW	K. LYNCH	12/09/02
CHKR	J. BALLARD	12/09/02
SECT		
DEPT		
PE	B. NEMEC	12/09/02
PJ	J. BALLARD	12/09/02
REG	J. BALLARD	12/09/02

ORNL DRAWING NUMBER: 8610

Project Name: CENTER FOR NANOPHASE MATERIALS SCIENCES

Site Sections and Details

1	48	49	50	PLANT	BLDG	FL	SH.	OF	TYPE	CLASS
3	C	X	X	8	8610	X	1	1	S	U
51	52	53								
NC	NA	IN								

REV 0 DATE 12/05/02 UTB

DRAWING APPROVALS

UT-BATTELLE

Oak Ridge National Laboratory

managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725

UT-BATTELLE, LLC, Oak Ridge, Tennessee

PROJECT NAME: CENTER FOR NANOPHASE MATERIALS SCIENCES

SITE SECTIONS AND DETAILS

8610

C2.49.01